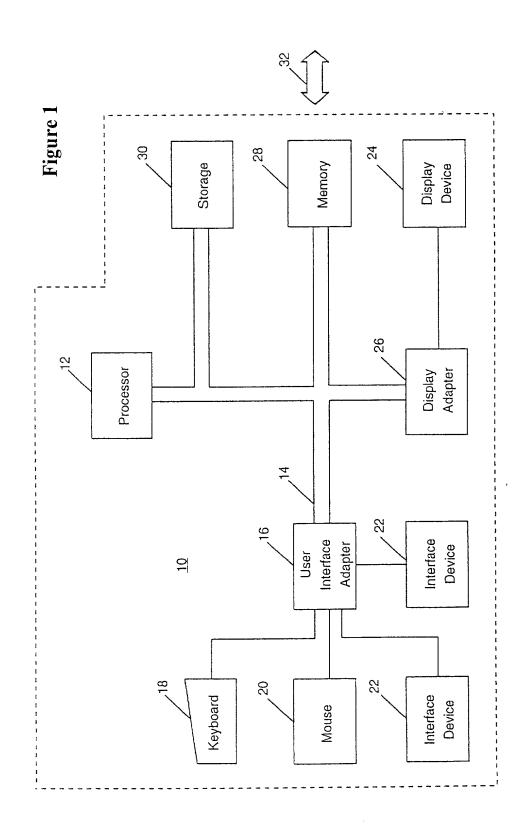
1/3 L. Poplawski (JRP) END920010032US1



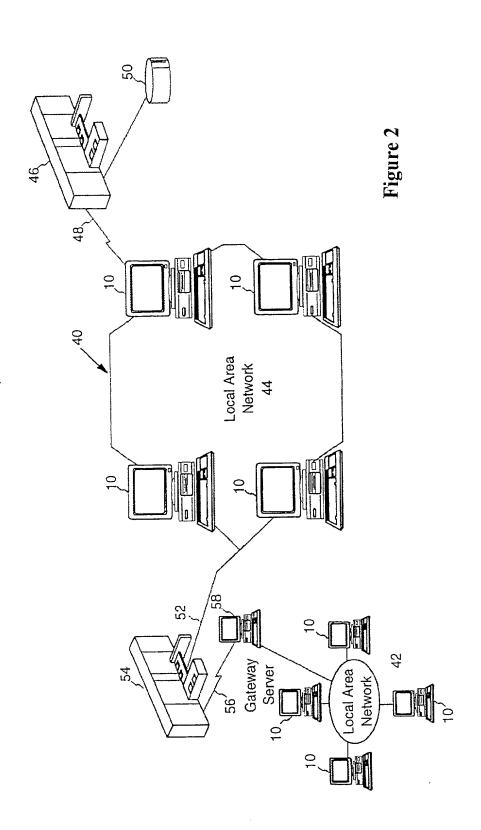


Figure 3

Method of converting a delimited flat file to a markup language specified by a document type definition file

Providing a delimited flat file having columns with headings Providing a map file conforming to said document type definition file and having tags and attributes including references matching said headings Forming a tree structure from said map file wherein each tag represents one or more nodes of said tree Traversing node-by-node said tree structure and for each said node entering said attributes into said markup language file When said attributes include one of said references, retrieving text from one of said columns with one of said matching headings of said flat file and entering said text into said markup language file

Figure 4

```
<!ELEMENT map (doctype?,stylesheet?,element_node+)>
<!ELEMENT stylesheet (#PCDATA)>
<!ELEMENT doctype (#PCDATA)>
<!ELEMENT element_node (attribute_node*,(text_node|element_node)*)>
<!ATTLIST element_node name
                                    CDATA
                                                #REOUIRED
                        occurrence (zero_or_more|one_or_more|optional|one)
"one"
                        isEntireRow
                                          (yes no)
                                                     "no">
<!ELEMENT text_node (#PCDATA)>
<!ATTLIST text_node
                                    CDATA
                                                #REQUIRED>
                        column
<!ELEMENT attribute_node (text_node)>
<!ATTLIST attribute_node name
                                    CDATA
                                                #REQUIRED>
```